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RETARDATION IN THE SCHOOLS AND SOME OF THE CAUSES

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The following material is the result of a careful study of the first eight grades in the schools of a town having a population of about 2,200.

There are enrolled in these grades 557 pupils, a number of whom have recently moved into the town, while others moved away from the town before this investigation was made. It was, however, possible to obtain accurate data concerning about 500 of the pupils enrolled during the year. These 500 were studied with a view of obtaining the number of years each was retarded, the particular grade or grades in which the retardation occurred, and some of the causes of the retardation.

In determining causes, only home conditions and attendance were considered.

METHOD

I. Lists of all pupils in each grade were prepared, together with the age last September and the age when first entering school.

Using Ayres's method of supposing a child retarded who has not been promoted each year, the number of years of retardation was determined by subtracting the age at which the pupil entered school from the age in September.

The figures showing the number of years of retardation for each pupil were corrected at the end of the school year, for those who were not promoted at the close of school.

The pupils who were shown by the above method to be retarded were asked to name the grades in which they had spent more than one year.

The results obtained proving untrustworthy, it was necessary to seek additional information in order to discover in what grades the retardation occurred.

As nearly all of the grade teachers have been teaching in the town as long as their pupils have been in school, the teachers were able to correct the data given by the pupils. In doubtful cases the records were also consulted. Nearly all of the cases of retardation and the grades in which they occurred were accounted for in this way.

II. The percentage of attendance of each child during the whole number of years he has been in school was determined by taking the average of his percentages of attendance for the several years.

On account of a large floating school population in the town, the number of pupils for whom the attendance figures could be determined was less than the number for whom retardation figures were determined.

III. In studying home conditions three determining factors were considered: (1) financial advantages of the home; (2) educational advantages of the home; (3) moral atmosphere of the home.

In studying these conditions the following grading was used:

Financial:

- A=considerable property
- B=moderate means
- C=poor

Educational:

- A=special school advantages
- B=common school education with limited advantages gained from reading and travel
- C=educational advantages limited to ability to read and write

Moral:

- A=all that could be expected
- B=fair—not all that could be expected
- C=influence not for good

Two lists of the pupils in each room were prepared: one was given to the teacher now in charge of these pupils and the other to the teacher who had the same pupils last year. Each of these teachers was requested to grade the home conditions of each pupil according to the above-named system of grading. In this way two opinions concerning the home conditions of each child were secured. In this grading scheme one teacher did not know the opinions of the other teacher who was grading the same list of pupils.

The opinions of the two teachers in each case coincided to rather a surprising degree. Out of 1,212 judgments, not counting the first grade, for which only one list was prepared, there were 113 judgments which differed by one point and 6 judgments which differed by two points from the corresponding judgments of the same lists. Where these opinions were much at variance and in doubtful cases, outside information was sought.

The opinions of the teachers seemed even more trustworthy on account of the fact that most of them are teaching in their home town, where they have lived since childhood.

RESULTS

Table I shows the number of years of retardation for the pupils in the different grades, and the grades in which the retardation occurred. By dividing the total years of retardation in each grade by the number of pupils in the grade for which this total of years of retardation is determined, the average number of years of retardation is determined.

The curve in Chart 1 is a graphical representation of the average number of years of retardation for the pupils in the different grades. The general direction of the curve is upward, with two sudden drops in Grade 3A and the sixth grade. This may mean that these two grades are composed of pupils of more than ordinary ability. It may also mean that the fifth grade is the point at which most of the retarded pupils leave school. There is then a sudden rise in the eighth grade to be accounted for.

The facts in the case are, Grade 3A is an unusually good grade, while this cannot be said of the eighth grade. The eighth grade contains a number of retarded pupils who did not drop out at the usual place. It is also noticeable from the table that most pupils who are retarded in the lower grades leave school before reaching the higher grades.

Before explaining Table II, it may be well to explain the significance of Grades 3A and 3B. Except during the past year, it has been customary for most pupils to spend two years in the third grade. With the exception of a few of the very brightest, the second-grade pupils have been promoted to Grade 3B, and after

TABLE I

DISTRIBUTION OF YEARS OF RETARDATION WHILE PUPILS WERE IN DIFFERENT GRADES

Grade	While in Grade										Total Years of Retardation	Number of Pupils in Grade	Average Number of Years of Retardation
	1	2	3B	3A	4	5	6	7	8	Unknown			
1.....	47									0	47	95	.49 $\frac{1}{2}$
2.....	27	6								0	33	53	.62
3B.....	28	15	39							0	82	55	1.49
3A.....	22 $\frac{1}{2}$	2	41	2						0	67 $\frac{1}{2}$	59	1.14
4.....	13	11	34	10	23					13	104	65	1.6
5.....	13	6	37	6	6	21				9	98	61	1.6
6.....	6	5	18	6	3	1	2			4	45	43	1.05
7.....	1	4	9	7	5	4	3	11		4	48	43	1.11
8.....	1	0	8	1	0	1	11	4	11	4	41	24	1.71
Total.....	158 $\frac{1}{2}$	49	186	32	37	27	16	15	11	34	565 $\frac{1}{2}$	498	1.13

This table counts 1 year in Grade 3B as retardation.



CHART 1.—Curve showing average number of years' retardation by pupils in different grades, counting 1 year in Grade 3B as retardation.

spending a full year in this grade they have been promoted to Grade 3A. In consequence, most of the pupils in the school above Grade 3B have spent nine years in the eight grades.

TABLE II

DISTRIBUTION OF YEARS OF RETARDATION WHILE PUPILS WERE IN DIFFERENT GRADES

Grade	While in Grade									Total Years of Retardation	Number of Pupils in Grade	Average Number of Years of Retardation for Each Grade
	1	2	3B	3A	4	5	6	7	8			
1.....	47									47	95	.494
2.....	27	6								33	53	.622
3B.....	28	15	5							48	55	.872
3A.....	22½	2	2	2						28½	59	.483
4.....	13	11	0	9	22					55	65	.846
5.....	13	6	2	6	6	17				50	61	.819
6.....	6	5	0	6	3	1	2			23	43	.534
7.....	1	4	0	8	5	4	3	11		36	43	.837
8.....	1	0	0	1	0	1	11	4	7	25	24	1.04
Total.....	158½	49	9	32	36	23	16	15	7	345½	498	.609

This table does not count 1 year in Grade 3B as retardation.

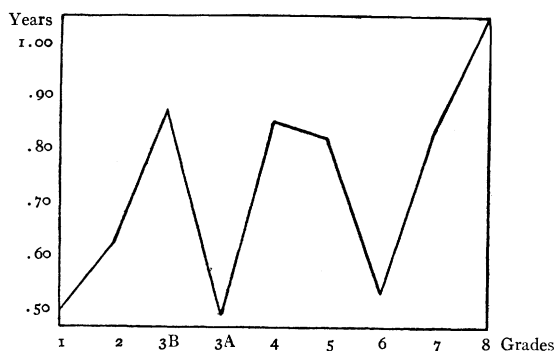


CHART 2.—Curve showing relation between grades and average number of years' retardation of pupils. This curve does not count 1 year in Grade 3B as retardation.

Table II shows the same relations as Table I except that in Table II one year spent in grade 3B is not counted as retardation, as is the case in Table I. Since most children, regardless of ability, were

required to spend two years in the third grade, it is evident that Table II, with the accompanying Chart 2, gives a nearer just representation of the average number of years pupils in the different grades are retarded.

TABLES III AND IV
DISTRIBUTION OF PUPILS BY GRADES AND AGES

Age	Grades									Total
	1	2	3B	3A	4	5	6	7	8	
6.....	79	6	0	0	0	0	0	0	0	85
7.....	21	15	5	7	0	0	0	0	0	48
8.....	11	13	13	16	5	0	0	0	0	58
9.....	3	10	12	22	14	1	0	0	0	62
10.....	1	3	9	12	15	11	4	0	0	55
11.....	0	1	3	6	12	17	13	3	0	55
12.....	0	0	2	0	9	15	11	9	0	46
13.....	0	0	5	2	6	10	8	15	4	50
14.....	0	1	0	0	3	5	7	12	13	41
15.....	0	0	0	0	1	0	1	5	4	11
16.....	0	0	0	0	0	0	0	1	5	6
17.....	0	0	0	0	0	0	0	0	1	1
18.....	0	0	0	0	0	0	0	0	0	0
Total.....	115	49	49	65	65	59	44	45	27	518
Above normal age.....	36	28	31	42	46	47	27	33	23	313
Percentage above normal.....	31.3	57.1	63.2	64.6	70.7	79.6	61.3	73.3	85.1	60.4
Above normal age.....	36	28	31	20	31	30	16	18	10	220
Percentage above normal.....	31.3	57.1	63.2	30.7	47.6	50.8	36.3	40	37	40.2

The light rule considers Grade 3B as retardation; the heavy rule does not consider Grade 3B as retardation.

Tables III and IV show the distribution of pupils in the grades according to age. Inasmuch as most pupils in this school enter at the age of six, the following would be the minimum age for pupils not retarded:

Grade 1.....	6 years
Grade 2.....	7 years
Grade 3B.....	8 years
Grade 3A.....	9 years
Grade 4.....	10 years
Grade 5.....	11 years
Grade 6.....	12 years
Grade 7.....	13 years
Grade 8.....	14 years

If one year spent in grade 3B is to be counted as retardation, the following becomes the list of ages for the different grades:

Grade 1.....	6 years
Grade 2.....	7 years
Grade 3.....	8 years
Grade 4.....	9 years
Grade 5.....	10 years
Grade 6.....	11 years
Grade 7.....	12 years
Grade 8.....	13 years

In Tables III and IV the light line would be the mark below which retardation is counted if the latter table is taken as a guide. The heavy line would be the mark of retardation if the former table is taken as the standard. Figures showing the percentage of retardation in each grade are given in the lower part of the table.

These results are further illustrated in Charts 3 and 4. The full light columns represent the number of pupils in each grade, the shaded portion represents the number who are retarded.

It is thus shown that, with the exception of the first grade, the percentage of retardation increases until the fifth grade is reached. From this point the percentage of retardation does not increase until the eighth grade is reached. This would show again that pupils retarded early in the grades drop out of school about the time they reach the fifth grade. The eighth grade exception has already been noted.

Tables V and VI show the percentages of retardation in the different grades as determined independently of the method used by Ayres in his "Laggards in Our Schools." The figures in these tables were determined by questioning the pupils and the teachers, and searching what records could be found in order to discover

how much each individual child had been retarded. In the main, this was done by subtracting the age on entering school from the age last September. The results are believed to be correct because practically all of the years represented by the differences in ages in September and at the time when the child starts to school were

TABLE V

TABLE SHOWING TOTAL ENROLMENT AND RETARDATION IN DIFFERENT GRADES,
COUNTING GRADE 3B AS RETARDATION

Grade	Number Enrolled	Number Retarded	Percentage of Retardation
1.....	95	49	51
2.....	53	21	40
3B.....	55	40	73
3A.....	59	45	76
4.....	65	49	75
5.....	61	50	82
6.....	43	28	65
7.....	43	28	65
8.....	24	20	83
Total.....	498	330	66.2

TABLE VI

TABLE SHOWING TOTAL ENROLMENT AND RETARDATION IN DIFFERENT GRADES,
NOT COUNTING 3B AS RETARDATION

Grade	Number Enrolled	Number Retarded	Percentage of Retardation
1.....	95	49	51
2.....	53	21	40
3B.....	55	22	40
3A.....	59	25	42
4.....	65	34	52
5.....	61	35	57
6.....	43	18	42
7.....	43	23	53
8.....	24	16	67
Total.....	498	243	48.7

accounted for by the pupils, the teacher, or the records. Following is a comparison between the two methods.

By Ayres's Method		Percentage of Retardation for Whole School
Counting 1 year in 3B as retardation.....		60.4
Not counting 1 year in 3B as retardation.....		40.2
By Actual Determination of Individual Cases		Percentage of Retardation for Whole School
Counting 1 year in 3B as retardation.....		66.2
Not counting 1 year in 3B as retardation.....		48.7

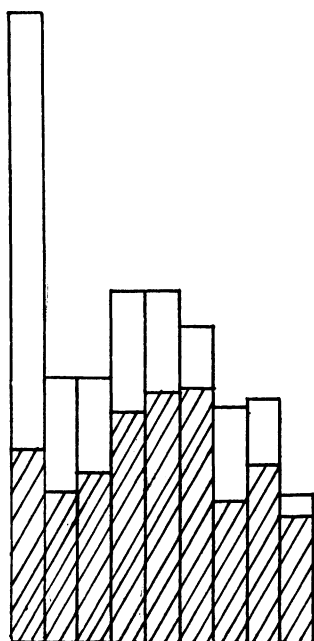


Chart 3

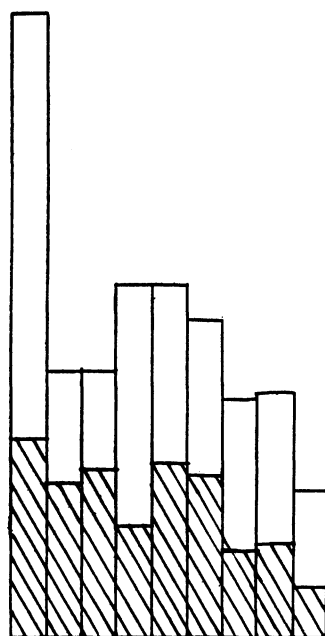


Chart 4

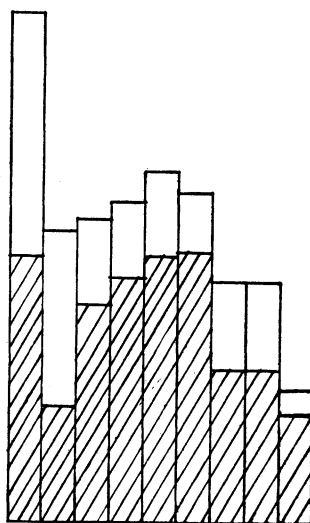


Chart 5

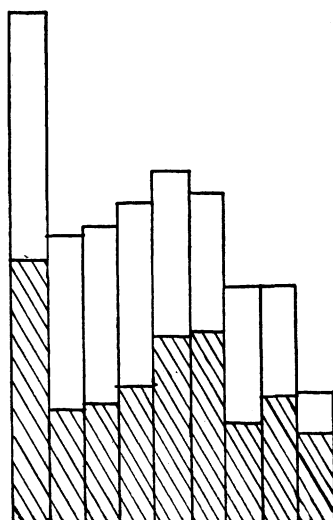


Chart 6

Charts 3 and 5 count 1 year spent in Grade 3B as retardation.

Charts 4 and 6 do not count 1 year in Grade 3B as retardation.

Charts 3 and 4 are based on Ayres's method.

Charts 5 and 6 are based on the method of individual study.

Charts 3, 4, 5, 6 represent the proportion of pupils in the different grades who have been retarded. The full-height columns represent the number of pupils in the different grades. The cross-hatched portions represent the number of pupils who have been retarded.

Ayres's method is thus shown to give approximately the same results as the method of studying individual cases.

Table VII shows the relation between retardation and the percentages of attendance for the whole time pupils have been in school.

In Chart 7 the abscissa represents the percentages of attendance, while the ordinate represents the percentages of retardation. Beginning with the level between 90 and 100 per cent on the left,

TABLE VII

TABLE SHOWING THE NUMBER OF CASES OF RETARDATION FOR DIFFERENT PERCENTAGES OF ATTENDANCE

Grade	Percentage of Attendance and Retardation												Below 50	
	95-100		100-90		90-80		80-70		70-60		60-50			
	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded
1.....	9	3	25	11	22	13	17	6	6	6	5	2	11	9
2.....	7	2	16	3	10	3	7	4	3	3	1	1	1	1
3B.....	10	9	19	17	11	7	9	8	4	4	1	1	1	1
3A.....	15	13	28	21	17	14	5	4	3	3	1	1	0	0
4.....	18	12	33	25	8	7	7	7	3	3	0	0	0	0
5.....	16	12	32	25	7	7	8	8	0	0	0	0	0	0
6.....	16	9	27	17	9	6	0	0	0	0	0	0	0	0
7.....	11	4	24	12	9	9	2	2	0	0	0	0	0	0
8.....	11	9	16	13	5	4	2	2	0	0	0	0	0	0
Total.....	113	73	220	144	98	70	57	41	19	19	8	5	13	11
Percentage of retardation		64½		65½		71½		72		100		62½		84½

In tables VII, IX, X, XI, XII, in the double columns of figures the first column contains the total number of pupils having the condition named as the heading of the double column. The second column in each double column contains the number of such pupils who have been retarded.

the curve shows an increase in percentage of retardation as the percentage of attendance decreases. Through the different intervals 90-100, 80-90, 70-80, 60-70, the percentage of retardation rises. Strange to say, the curve is lower between 50 per cent and 60 per cent of attendance and below 50 per cent of attendance than between 60 per cent and 70 per cent.

By carefully examining Table VII, it is seen that all of the cases of attendance below 60 per cent occur in the first three grades. All of these pupils except five in the first grade are retarded. These

five were promoted from the first grade to the second grade in spite of low attendance. There being few cases showing a percentage of attendance below 60 per cent, these five not retarded make the percentage of retardation low. However, with the exception of the interval 60 per cent to 70 per cent, the curve remains at about the same level from 100 per cent back to 50 per cent of attendance. This would mean that the percentage of retardation

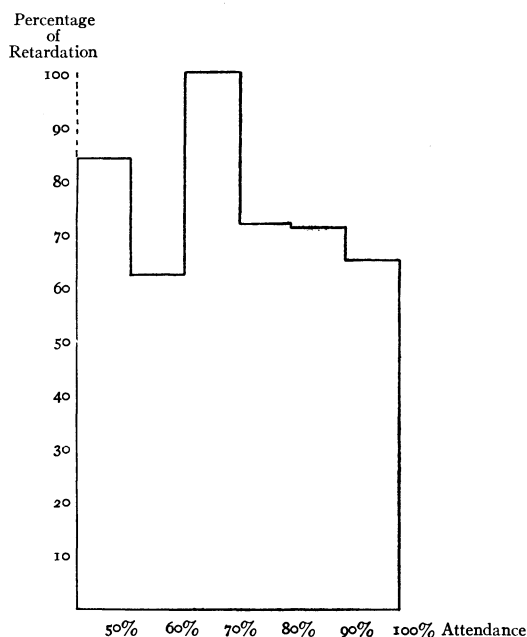


CHART 7.—Relation between retardation and attendance, based on number of cases of retardation.

is about the same for all pupils whose attendance is irregular. This curve deals only with cases of retardation and not with the number of years of retardation. The pupils whose percentage of attendance is between 90 per cent and 100 per cent may have an average of only one year of retardation, while those between 50 per cent and 60 per cent may have an average retardation of several years.

Table VIII and the accompanying Chart 8 show this to be true. In this table the average number of years of retardation for the

TABLE VIII

TOTAL NUMBER OF YEARS OF RETARDATION IN EACH GRADE FOR THE FOLLOWING PERCENTAGES OF ATTENDANCE

Total Years Retardation

Grade	90-100%	80-90%	70-80%	60-70%	50-60%	Below 50%
1.....	11	10	5½	9	2	11
2.....	11	7	7	3	2	1
3B.....	23	12	21	8	6	3
3A.....	29	23	8	5	2	0
4.....	45	8	20	11	0	0
5.....	33	22	21	0	0	0
6.....	27	11	0	0	0	0
7.....	17	21	3	0	0	0
8.....	26	9	6	0	0	0
Total retardation in years..	222	123	91½	36	12	15
Total number having attendance indicated.	220	98	57	19	8	13
Average years of retardation.....	1.00†	1.25	1.60	1.89	1.50	1.15

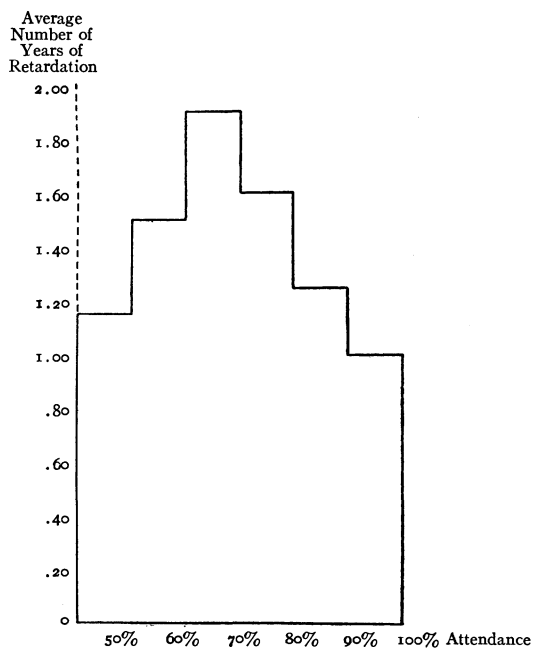


CHART 8.—Relation between retardation and attendance, based on number of years of retardation.

different percentages of attendance is calculated. In Chart 8 the curve shows a gradual uniform rise from 100 per cent of attendance back to 60 per cent. The decline from this point is accounted for as in Chart 7.

Tables IX, X, and XI show the relation between home conditions and retardation. In the letter combinations, the letter standing in the first place represents the financial conditions of the home; in the second place, the intellectual conditions of the home; in

TABLE IX
NUMBER OF CASES OF RETARDATION CONSIDERING HOME CONDITIONS

Grade	AAA		AAB		AAC		ABA		ABB		ABC		ACA		ACB		ACC	
	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded
1.....	2	0	1	0	0	0	3	0	4	0	0	0	0	0	0	0	0	0
2.....	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
3B.....	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
3A.....	0	0	0	0	0	0	4	0	2	1	0	0	0	0	0	0	0	0
4.....	1	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0
5.....	1	0	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0
6.....	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
7.....	0	0	0	0	0	0	3	0	1	1	0	0	0	0	0	2	1	0
8.....	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0
Total.....	6	0	1	0	0	0	25	4	7	2	0	0	0	0	0	3	1	
Percentage of retardation								16		29							33 $\frac{1}{3}$	

the third place, the moral conditions of the home; e.g., BCA would mean the home conditions of the pupils in question have been rated as follows: financially, B; intellectually, C; morally, A.

Twenty-seven combinations of home conditions are possible. For each of these is determined the number of pupils having such a combination of home conditions and the number of such pupils who are retarded. From these figures the percentage of retardation for each individual combination is calculated. In general, where there is a preponderance of A's and B's, the percentage of retardation is lower, while where there is a preponderance of B's and C's, the percentage of retardation is higher.

TABLE X
NUMBER OF CASES OF RETARDATION CONSIDERING HOME CONDITIONS

Grade	BAA		BAB		BAC		BBA		BBB		BBC		BCA		BCB		BCC	
	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded
1.....	1	0	0	0	0	0	15	7	8	2	2	0	3	3	6	4	6	2
2.....	0	0	0	0	0	0	5	1	2	0	0	0	1	0	2	0	0	0
3B.....	0	0	1	0	0	0	3	0	3	2	1	1	0	0	0	0	0	0
3A.....	1	0	0	0	0	0	9	3	2	0	0	0	0	0	0	0	0	0
4.....	1	0	0	0	0	0	13	1	1	0	1	1	0	0	3	2	0	0
5.....	1	1	0	0	0	0	5	3	10	4	0	0	0	0	5	4	0	0
6.....	3	0	0	0	0	0	8	3	1	0	0	0	0	1	1	1	2	2
7.....	1	0	0	0	0	0	7	3	2	1	3	2	2	1	2	2	1	0
8.....	0	0	0	0	0	0	4	3	3	1	0	0	1	1	1	1	1	0
Total.....	8	1	1	0	0	0	69	24	32	10	7	4	7	5	20	14	10	4
Percentage of retardation		12½						35		31½		57		71½		70		40

TABLE XI
NUMBER OF CASES OF RETARDATION CONSIDERING HOME CONDITIONS

Grade	CAA		CAB		CAC		CBA		CBB		CBC		CCA		CCB		CCC	
	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded
1.....	0	0	0	0	0	0	0	0	2	1	2	0	1	1	17	11	22	16
2.....	0	0	0	0	0	0	2	0	3	0	1	1	0	0	17	10	10	9
3B.....	0	0	0	0	0	0	6	3	6	2	2	1	1	1	13	12	12	8
3A.....	0	0	0	0	0	0	0	0	8	4	2	2	0	0	12	12	10	5
4.....	0	0	1	0	0	0	3	1	6	1	0	0	0	0	8	8	23	19
5.....	0	0	1	0	0	0	0	0	4	3	0	0	0	0	13	13	8	8
6.....	0	0	0	0	0	0	2	2	3	0	4	3	3	2	0	0	6	4
7.....	0	0	0	0	0	0	4	3	1	1	0	0	0	0	7	4	6	6
8.....	0	0	0	0	0	0	0	0	3	2	0	0	2	2	2	2	3	3
Total....	0	0	2	0	0	0	17	9	36	14	11	7	7	6	89	72	100	78
P'ct'ge of retardat'								53		39		64—		86—		89—		78

Following is a list of combinations of home conditions, giving in order the percentages of retardation. Those showing no retardation are omitted.

Financial	Educational	Moral	
B	A	A	12½
A	B	A	16
A	B	B	29
B	B	B	31½
A	C	C	33½
B	B	A	35
C	B	B	39
B	C	C	40
C	B	A	53
B	B	C	57
C	B	C	64
B	C	B	70
B	C	A	71½
C	C	C	78
C	C	A	86
C	C	B	89

All percentages of retardation above 50 per cent accompany combinations in which B's or C's occupy first and second positions. Of the eight combinations giving percentages above 50 per cent, seven contain C in the middle or second position; five contain C in the first position. In the third positions are found 3 A's, 2 B's, and 3 C's. These observations would show that financial and intellectual conditions are larger factors in determining retardation than are moral conditions, and also, that intellectual conditions are the most prominent factors of all, while moral conditions seem to be least prominent.

These conclusions are more clearly shown from Table XII and the accompanying figure. The table shows an increase in retardation with the descending scale, A to B to C, in each of the three general classes—financial, educational, and moral.

The curves in Chart 12 give a graphical comparison of the whole field of retardation and home conditions considered in Table XII. Here we find the highest educational condition accompanied by the lowest percentage of retardation and the lowest educational condition accompanied by the highest percentage of retardation.

The reverse is true with moral conditions. The best moral conditions are accompanied by higher percentages of retardation than are the best financial and educational conditions, while the

TABLE XII
RETARDATION AND HOME CONDITIONS

GRADE	FINANCIAL						EDUCATIONAL						MORAL					
	A		B		C		A		B		C		A		B		C	
	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded	Total	Retarded
1.....	10	0	41	18	44	29	4	0	36	10	55	37	25	11	38	18	32	18
2.....	4	0	10	1	33	20	2	0	14	2	31	19	11	1	24	10	15	9
3B.....	1	0	8	3	40	27	1	0	22	9	26	21	11	4	23	16	15	10
3A.....	6	1	12	3	32	23	1	0	27	10	22	17	21	2	24	17	12	7
4.....	3	1	19	4	41	29	3	0	26	5	31	29	22	3	19	11	24	20
5.....	6	1	21	12	26	24	3	1	24	11	26	25	12	5	33	24	8	8
6.....	3	0	15	6	18	11	3	0	21	8	12	9	19	7	5	1	12	9
7.....	6	2	18	9	18	14	1	0	21	11	15	11	17	7	13	9	12	9
8.....	3	2	10	6	10	9	0	0	13	8	10	9	10	8	9	6	4	3
Total.....	42	7	154	62	262	186	18	1	204	74	228	177	148	48	188	112	134	93
Percentage of retardation		16 $\frac{2}{3}$		42 $\frac{1}{2}$		71		5 $\frac{5}{8}$		36		77 $\frac{1}{2}$		32 $\frac{1}{2}$		59 $\frac{1}{2}$		69 $\frac{1}{2}$

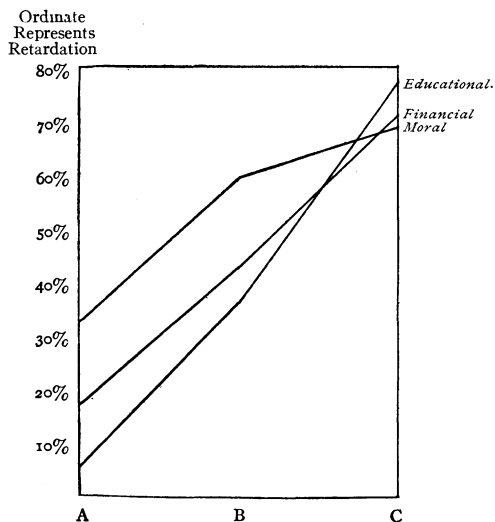


CHART 12.—Comparison of retardation and home conditions.

worst moral conditions are accompanied by a lower percentage of retardation than either the worst financial conditions or the worst intellectual conditions. At both extremes of the scale the curve

for financial conditions occupies a position between the other two curves.

In the order of accompanying percentages of retardation, home conditions may be arranged as follows:

A educationally.....	5 $\frac{5}{8}$ per cent retardation
A financially.....	16 $\frac{3}{8}$ per cent retardation
A morally.....	32 $\frac{1}{2}$ per cent retardation
B educationally.....	36 per cent retardation
B financially.....	42 $\frac{1}{2}$ per cent retardation
B morally.....	59 $\frac{1}{2}$ per cent retardation
C morally.....	69 per cent retardation
C financially.....	71 per cent retardation
C educationally.....	77 $\frac{1}{2}$ per cent retardation

GENERAL CONCLUSIONS

1. Taking the mean of results obtained by Ayres's method of determining retardation by distribution of ages in grades, and the results obtained by studying individual cases, about 44 per cent of the pupils considered in this discussion have failed to complete one grade each year.

2. Most of the pupils who are retarded in the lower grades are eliminated before reaching the higher grades.

3. The fifth grade marks the point of greatest elimination.

4. In general, the average number of years a child spends in each grade varies inversely as his percentage of attendance.

5. If the financial, educational, and moral conditions of the home are rated in the descending order, A to C, the A conditions in each case are accompanied by the lowest percentages of retardation, while the C conditions are accompanied by the highest percentages of retardation.

Of these three, the educational condition constitutes the greatest factor, and the moral condition the least factor, in determining retardation.